

ABSTRACT

The present invention relates to methods for enhancing exogenous epitope display on an MHC class I molecule through inhibition of TAP activity. Mammalian cell-infecting virus
5 vectors encoding both a TAP inhibitory factor and an epitope-linked- β 2m were constructed and introduced into mammalian cells. The present inventors succeeded in displaying on the cell surface in high frequency the MHC class I/peptide complex containing an epitope-linked- β 2m expressed from the vector by reducing endogenous MHC class I/peptide complexes by the action of the TAP inhibitory factor. The present invention finds utility in vaccine therapies for
10 infectious diseases, cancers, and the like.